

REMARKS

1. **Introduction**

Applicants have cancelled claim 13, and have amended claims 1, 6 and 11. Accordingly, claims 1-12 and 14-17 are presently pending in the above-identified application. Reconsideration and re-examination is hereby respectfully requested.

Applicants also wish to thank the Examiner Mohandesi for the courtesy of the several phone conversations with counsel John Rees on June 10-11, 2002.

2. **Claim Rejections under 35 U.S.C. § 103**

Claims 1-17 stand rejected on 35 U.S.C. § 103(a) as being unpatentable over Hayashi (U.S. 5,274,322) in view of Thomas (U.S. 4,163,187). Applicants respectfully traverse this rejection. Independent claims 1, and 6, and independent claim 11, as amended, recite, among other things, that a first winding is wound in “a full pitch pattern” and that a second winding is wound in “a short pitch pattern.” Thomas (4,164,187) does not teach or suggest the above-quoted limitations. In Thomas, both the first stator winding (designated by reference numeral 25 in Figure 5) and the second stator winding (designated by reference numeral 26 in Figure 5) are each wound around three stator teeth. As understood in the art, and as specifically described in Applicants’ specification, the terminology “full pitch pattern” and “short pitch pattern” refer to the number of stator teeth around which the stator winding is deployed. Since the first stator winding 25, and the second stator winding 26 in Thomas both encompass or surround the same number of stator teeth, respectively, one of such stator windings cannot be a short pitch pattern, while the other be a full pitch pattern, as positively claimed.

Independent claims 1 and 6 have been amended, and independent claim 11 has been amended in part, in view of a Japanese patent publication JP 06-284,615, as set forth in a search report of a corresponding European patent application, and previously submitted by Applicants in an Information Disclosure Statement. A computer generated English-language translation of Japanese publication JP 06-284,615, as obtained from the Japanese Patent

Office website, is attached hereto as Exhibit B. As shown in Figure 2 of JP 06-284,615, a first stator winding (comprising winding segments Y1, Y2 and Y3) are wound in a full pitch pattern, weaving back and forth, and skipping three stator teeth. JP 06-284,615 employs what is known as a "wave winding." The second stator winding of JP 06-284,615 (comprising segments Delta 1, Delta 2, and Delta 3) is also a wave winding but skipping two stator teeth while moving in a first direction, and skipping four stator teeth while moving in the opposite direction. Applicants' amendments to the independent claims to include the recitation of "at least one complete loop surrounding a first predetermined number of teeth of said stator" is directed to clearly distinguishing reference JP 06-284,615.

In view of the foregoing, Applicants respectfully submit that to the claims, that all claims are presently in a condition for allowance.

3. **Conclusion**

A genuine effort to resolve all issues has been made. For at least the above-cited reasons, all of the claims presently pending in this application are believed to be allowable. If the Examiner has any further questions or concerns regarding this matter, he is invited to contact Applicants' undersigned attorney.

Respectfully submitted,

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EXHIBIT A

VERSION OF CLAIMS WITH MARKINGS
TO SHOW CHANGES MADE

1. (Once Amended) An alternating current (AC) generator comprising a stator and a rotor, said rotor comprising a plurality of pole pairs, said stator comprising a first winding wound in a full pitch pattern with at least one complete loop surrounding a first predetermined number of teeth of said stator and a second winding wound in a short pitch pattern with at least one complete loop surrounding a second predetermined number of said teeth, said first predetermined number being different than said second predetermined number.

6. (Once Amended) A stator for an alternating current generator, said generator having a rotor with poles, comprising:

a substantially annular body portion;
a plurality of teeth extending radially inwardly from said annular body portion;
a plurality of slots defined between said teeth;
at least two windings wound around said teeth and inserted into said slots,
wherein the number of stator slots is equal to $2 \times n \times p$, where p is the number of electrical phases per winding, and n is the number of rotor pole pairs, and
wherein a first one of said windings being wound in a full pitch pattern with at least one complete loop surrounding a first predetermined number of teeth of said stator and a second one of said windings being wound in a short pitch pattern with at least one complete loop surrounding a second predetermined number of said teeth, said first predetermined number being different than said second predetermined number.

11. (Once Amended) A stator for an alternating current generator comprising at least a pair of multi-phase windings, one of the windings being a wye type winding and the other one of the windings being a delta type winding wherein one of the windings is a full pitch winding with at least one complete loop surrounding a first predetermined number of teeth of said stator and the other one of the windings is a short pitch winding with at least one

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complete loop surrounding a second predetermined number of said teeth, said first predetermined number being different than said second predetermined number.

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EXHIBIT B

(SEE ATTACHMENT)

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